



Durable Homes
By The
Bishopric
System

The Mastic Wall Board
& Roofing Co.
Cincinnati, Ohio.

John J. Randall
Pres.

John J. Randall, Jr.
Vice-Pres.

L. F. Willets
Sec.

E. S. Randall
Treas.

JOHN J. RANDALL COMPANY

OWNERS AND DEVELOPERS OF
WOODCLEFT, WOODCLEFT HARBOR
and **RANDALL BEACH**

FREEPORT, N. Y., March 11, 1914.

TEWS LIME & CEMENT CO.,
Mr. Frank Piphorn,
895 Buffum Street,
Milwaukee, Wis.

Dear Sir:—We are in receipt of your favor of the 7 inst. in reference to Bishopric Stucco Board.

We beg to advise you that we have used this board on two houses which we have built during the past fall and winter, one of them being completed and the other nearly so. We are very well satisfied with the board, and think that it is superior to any metal lath which can be used for that purpose.

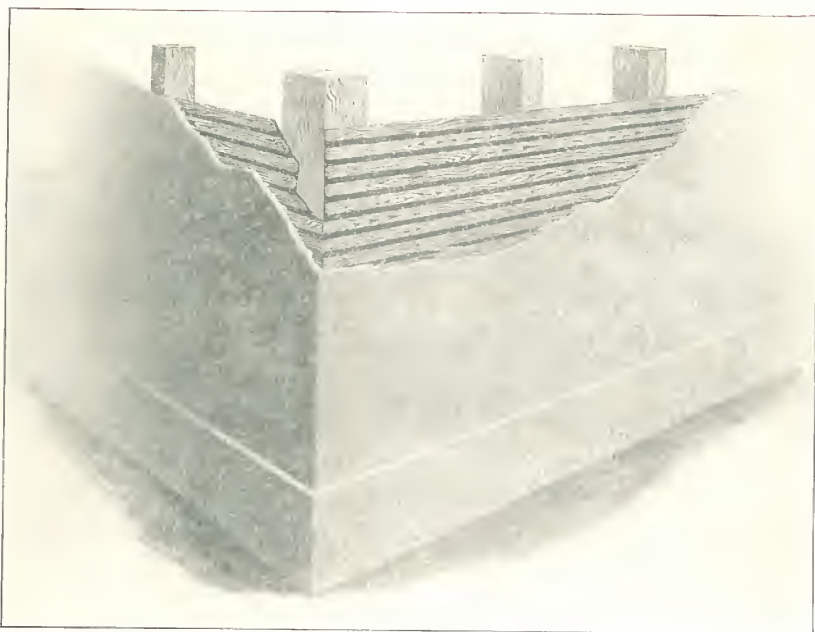
The house which is completed has stood during the winter, and shows no effects whatever from either heat or cold. There are no cracks, nor any signs of dampness.

Yours very truly,

JOHN J. RANDALL COMPANY,

By E. S. RANDALL, Treasurer.

Durable Homes *By The* Bishopric System



Showing Stucco Applied to Bishopric Stucco or Plaster Board and the Stucco Board to the Studding.

Being a discussion concerning Bishopric Stucco or Plaster Board—the only background that holds stucco and plaster permanently and prevents cracking.

Patented and Made Only by

The Mastic Wall Board & Roofing Co.
Cincinnati, Ohio

Cutting Building Costs

OLD style building methods double the cost of building. Stop it! Bishopric Stucco Board cuts in half the cost of applying plaster, cement and stucco finish to buildings of every description.

Bishopric Stucco Board makes plaster and cement walls *permanent*—they can't crack, crumble or disintegrate when this time-defying stucco board is used. For five long years we have tested Bishopric Stucco Board. Every test that a score of building experts know has been used upon it. And it has always "stood up"—always made good. Its recent introduction and service already rendered has won it hundreds of friends. It will win you, once you know its many merit-points over other backgrounds.

Build Once—Right

NO matter whether you are building a bungalow, house, garage, barn or factory, let the *first* cost of your building be the *only* cost. Bishopric Stucco Board used on the outside relieves you of *after* expense. And that's a good thing to know *before* you build. You can use *any* outer material—ordinary plaster, cement, concrete or stucco. Whatever material you use cannot loosen, for the *dovetail* laths lock it on, up, and in forever.

Remodel the Old Frame Building

BISHOPRIC STUCCO or PLASTER BOARD makes it possible to convert old frame buildings into up-to-date stucco buildings quickly and at a very low cost. All that is necessary is nail Bishopric Stucco or Plaster Board over weather-boarding (or other finish) and apply stucco. Eliminate continuous painting and do away with the objectionable muss.

What Bishopric Stucco or Plaster Board Is

BISHOPRIC STUCCO or PLASTER BOARD is made of dovetail lath imbedded in toughened Asphalt Mastic, which is surfaced with sized cardboard. This board is made with creosoted laths and natural wood laths, dovetail. Creosoted laths eliminate any possible chance of warping from dampness. Laths keep surface stiff, dovetail grip cement as nothing else can, distributing strain evenly. Asphalt Mastic is moisture-proof and fire-resisting. As a staunch and satisfactory background for cement nothing compares with it.

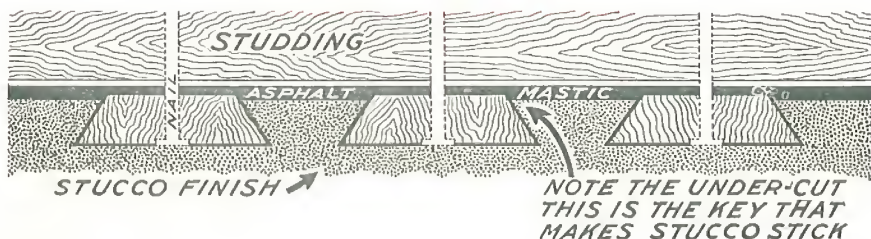


Bishopric Stucco or Plaster Board is intended for interior and exterior construction. For interior it is not necessary to buy the creosoted board; therefore, you may buy the Bishopric Stucco or Plaster Board with the natural wood laths, dovetail. This is suitable for interior use, and there is a saving in the purchase. We do recommend for exterior the Bishopric Stucco or Plaster Board creosoted.



Here's another big Bishopric Stucco Board merit-point: It is temperature-proof and sound deadener. A very thin concrete wall over Bishopric Stucco Board keeps the house warm in winter and cool in summer.

Study This Diagram



Don't Use Metal Lath Background

THE days of metal lath for plaster, cement and stucco are over—for those who know its big expense and unsatisfactory performance. It is absolutely impossible, as many building experts testify, to secure a good stucco job with a light, flimsy background, such as metal lath.

Metal Lath Rusts and Breaks

METAL lath means big repair bills. They rust, break, pull loose and crack the walls. This is costly to say nothing of its other unsatisfactory features. Very little of the flimsy metal background is really nailed fast to its supports. Occasional nails or staples are all that hold the cement walls to the studding. Once broken by the weight of the walls and these loose metal backgrounds sag under the strain. Cracks follow quickly. Once cracking starts it travels fast and far. One never knows where it will end.

Is it worth while when one can purchase a staunch background for stucco that “stays put” for all time? We'll leave it right up to your own good judgment.

Metal Lath Is Costly

THE *first cost* of metal lath is *more* than that of Bishopric Stucco Board. Then you must use from one-third to a half more cement to get rigid walls with metal lath. Now, here's the net of it: If you want to add fully one-half to the cost of your stucco work and get unsatisfactory results, use metal lath. On the other hand, if you want a first-class stucco job in every respect and want to save money besides, use nothing but Bishopric Stucco Board. Think it over.

Bishopric Stucco or Plaster Board is Easy to Apply

BISHOPRIC STUCCO BOARD comes in 25-foot lengths, four feet wide. Suitable for studding at standard centers. Just nail Bishopric Stucco Board to bare studding and walls are ready for cement, plaster or stucco. Breaking joints occasionally. Simple, isn't it?

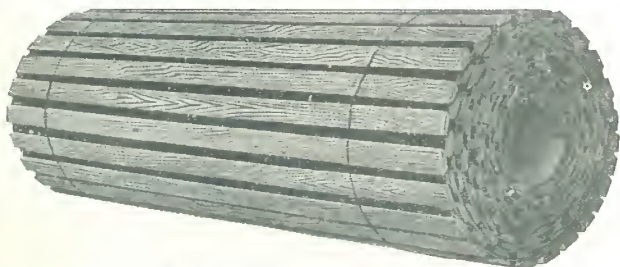
One man can put on Stucco Board faster than cement plasterers' can follow. Hand-saw, hammer and nails are all you need to apply it. Expert workmen are unnecessary. Think of the saving on your labor bill!

No Waste

THERE is no waste of material or time when Bishopric Stucco Board is used. Every foot is utilized. In its application you don't have to pay for windows and doors. This means that 1,000 square feet of Bishopric Stucco Board will cover 1,000 square feet of wall. All these little "rake offs" are saved to you.

Shipment

BISHOPRIC STUCCO or PLASTER BOARD is shipped in rolls containing 100 square feet, and is four feet wide and twenty-five feet long. The Creosoted Bishopric Stucco or Plaster Board weighs one pound to the square foot or 1,000 pounds to 1,000 square feet. The Bishopric Stucco or Plaster Board not creosoted (the natural wood) weighs ninety pounds to the 100 square feet or 900 pounds to 1,000 square feet.



Style of Shipping Package.

Some Things You Want To Know

OWING to the tremendous inroads that Bishopric Stucco or Plaster Board has made, and is making, into the metal lath industry, a number of "objections" have been made to it.

Remember this, however: All of these "objections" come from metal lath makers, and all of them have failed when put to the test. Where economy and service are the considered factors, Bishopric Stucco or Plaster Board always wins out.



A Few "Objections" Anticipated

1. Heat Expansion. "Heat expansion will buckle it." The fact is that it is proof against this condition which metal lath is not. Wood will shrink, not expand, under heat. If it shrinks, no harm is done, for the shrinkage is infinitesimal and will not lessen the hold of the dove-tail on the clinch. Each shrinkage will be on the separate individual lath and will not affect the sheet. The lath, of course, will not be affected lengthwise. The asphalt and card backing is sufficiently elastic to take up all expansion by the thickening of the backing. The cement coating will expand about half an inch to fifty feet and an increase or decrease of one ten-thousandth of an inch in thickness of the backing will account for that amount of expansion. Thus, the backing being elastic, will overcome all expansion easily. These figures cover a variation in temperature ranging from six below to one hundred and thirty degrees above zero.

2. "Dampness will expand the wooden strips and crack the stucco." The lath strips are made of a resinous wood, which resists moisture, and if there is any actual expansion as well as a theoretical one, it is not greater than the movement of the cement mixture in its chemical action when the mixture is properly made and applied. There is positively no greater tendency to crack when setting than on metal lath, and actual experience shows that there is none whatever on the stucco when used on stucco board, if the work is properly done. It should be remembered that a richer mixture than three to one is too rich for preparation of waterproofing compounds, and the surface will have a tendency to crack. A leaner mixture than three to one has too much sand for proper filling of the tiny spaces with cement and compounds, and is not sufficiently strong for permanency. The cement mixture cannot properly perform its chemical readjustments in dry and windy weather before it will set, unless the surface is sprayed; if this is done there will be no cracks of any kind and if the stucco is waterproofed in its first and second coats there can be no expansion of the lath strips and no after-cracking. At

802 Parker Street, Newark, N. J., the stucco, after setting and months of drying, was kept reeking wet for about three weeks to test this point, and the result was that there was not a single weakness of any kind developed. Ordinary weather would never give it such a severe test as this. This building was waterproofed with two pounds hydrotite to each one hundred pounds of cement on about three-fourths of the building, and with a seven to ten per cent of hydrate of lime for the balance as a water proofer. Actual tests showed one hundred per cent of satisfactory results in each case. The third and fourth coats (both dash) were one to one mixture with no waterproofing. On this job there was a saving of forty-five per cent of material as compared with a wire-cloth job at 74 Hillside Avenue, Orange, N. J., done by the same mason a few weeks before. Cracks have developed in the latter job, but not in the former. No dampness from leaky windows and leaky gutters can reach the lath strips, as they are protected with an absolutely waterproof sheet of asphalt mastic.

3. "The weight of the stucco will tear off the lath." No, it will NOT, if the lath are properly nailed, a nail being used to each lath at every point where it crosses a stud, or four nails to each lath where used over sheathing. A house recently stuccoed on wire-cloth in Maplewood, N. J., has recently had the sad experience of having the stucco fall, due to too few staples being used, and rarely are more than one staple used to each square foot. With four nails in each lath strip, this stucco board will last for generations. Stucco weighs from ten to fifteen pounds per surface foot, and it should be supported with the nailing obtained in Stucco Board, not the few scattering staples generally used. Then, again, for a nail to break it must be a clean shearing process, as it must break between the lath and stud where there is no space, while the staple usually holds the lath somewhat extended from its bearings.

4. "The lath strips will dry rot." Some say this who have seen stucco houses have their sheathing and frames rot away in a few years. As the asphalt mastic will prevent dampness reaching the frames, no dampness can get at the lath strips from inside, and if the stucco is waterproofed as above, no dampness can strike it from without. Moreover, imbedded between the asphalt mastic and the cement, completely shut away from the air, there can be no air action and consequently no rot. In the everglades of Florida, are logs lying in the water that have been there for centuries; remove them and expose them to the air and they will rot as other wood. Houses are painted to keep away the air. Boards properly painted on both sides have been known to last for centuries. Enterprising farmers have for years imbedded their fence posts in waterproof concrete footing to make them permanent. These lath strips imbedded between the asphalt and cement will outlive the house itself. The metal lath of the cheaper grades will rust to powder in from three to five years, and the better grades in comparatively shorter periods. In some of the seashore towns owners have used common lath recently in the hope of getting away from metal lath troubles.

5. "The building rocking in the wind will tear the backing board." This is distinctly untrue. A settlement of three sixty-fourths of an inch will crack the walls seriously if the settlement occurs during a period of twenty-four hours. Storms rarely crack the walls of a house, except real tornadoes. This shows that rocking is really vibration, as otherwise the walls would equal a central settlement of three sixty-fourths of an

inch, and that is only about one one-hundred-and-twenty-eighth of an inch to a four-foot piece of wall board. The wall board is sufficiently elastic to accommodate a motion of one thirty-second of an inch at each edge or a total of one-sixteenth of an inch; hence, it is four times safe. Another view is that the wall board is more elastic than plastering and as plastering stands ordinary storms the wall boards will still better stand them.

6. "The clinch will break off." Oliver Wendell Holmes in his "Wonderful One Hoss Chaise," that ran a hundred years to a day, had every point just as strong as another; there was no weak point. If you use good material and put it on thick enough the outside wall will be strong enough; then if there is a weakness, it will be that the clinch is not wide enough, for the dovetail groove will not allow the stucco to get away, the nails will not allow the wooden strips to get away, the terproofing will not allow the strips to rot, the mastic will protect from the inside, the liberal nailing will not allow the weight of the stucco to give any trouble, and thus the only weakness can be cured by making the clinch wide enough. When plastering is broken away it is the clinch that fails. Look at an old plastered wall being torn down, and see the clinch stay between the lath after the plastering has fallen, and it will be clear to you that the weakness was the clinch not being wide enough. It could not be on the ordinary lath, because the pressure of the trowel would have pushed all the mortar through the wall if the lathe had been wide enough apart. On the stucco board there is a mastic background, and the mortar will not pass through, thus the space can be made any amount desired, and the board is supplied with wide openings, which is as strong as the strongest other parts.

7. "The stucco will not stick to the surface of the lath strips and will come off between the clinch lines." This is partly answered in the last section. If this criticism was true then all plastered walls would fall, and all old-fashioned mortar walls, all patent plaster walls, all cement mortar walls, would have fallen long ago. From time immemorial mortar work on frame exteriors in foreign countries (England among them) has been done on wooden lath, and this defect has not been known among the natives. Ordinary lath has no surface advantage over the lath used in Bishopric Stucco or Plaster Board, and the clinch is far superior in the mastic boards.

8. "It cannot be used in panelled or half-timbered effect without so much cutting that the cost would be prohibitive." There is no occasion for such cutting. Put the stucco board on the building before trimming, then use seven-eighth-inch stock in stead of one and one-eighth-inch and save twenty-five per cent on your pine or cypress bills. Nail your seven-eighth-inch panel strips on over the stucco board and save a lot of labor as compared with shipping wire lath. Remember, too, that you are saving about forty to forty-five per cent of your mortar, as compared with metal lath work.

9. The shrinking of the sheathing will crack and buckle the stucco board." Put the sheathing on horizontal; it is the best way; it gets more nails than diagonal; it does not mislead in the location of a leak that follows the shiplap; it does not pry open the house in settling, as in diagonal work, and it ties the house together better. Then put the stucco board on vertical. The shrinkage of the sheathing cannot buckle the stucco board when end grain crosses side grain. When the stucco

board is put directly on the frame, put it on horizontal so that it will cross the grain of the studs or wall strips. If you must use diagonal sheathing, it is best to put the stucco board on also diagonally in the opposite way, so that it will cross the grain. Do not be afraid to use the Stucco Board *vertical*. It was used that way at 802 Parker Street, Newark, N. J. When the stucco is SET it cannot get away because of the dovetail grooves; when it tries to slide down it cannot because of the rough uneven groove. If the stucco is not washed down by a hose while you are putting it on, it will adhere just as it did at Parker Street, and everywhere else where it is used vertically. Remember, it should always CROSS the grain of the underwood just as is the case with double floors.

10. "Except in balloon construction, it will buckle where and when the intertie shrinks." The shrinkage of an intertie will be about one-twelfth of an inch, and it is possible that in rare cases buckling could happen; but there is a sure remedy: use a belt line of about the same or greater vertical measurement. For a four-inch intertie use a belt line four inches or more; for a six-inch intertie use a six-inch or more belt line. You should do the same thing when metal lath is used for the same risks exist. You should do the same thing in your stairways at the second and third floor lines—break out a two or three-inch line in the plastering and cover with a facier board running around the stair well hole, or where wall board is used leave a one-inch opening.

11. "It cannot be used around the cornice, under eaves, and in other small places, as wire can." The contrary is true; it is better than wire for such places. If you use wire you must always have sheathing while this is sheathing itself. See the time and cost saved in building porches—nail on the stucco board and porch is built and lathed at the same time. Try it once and you will realize that it is a great time saver compared with wire lath and snip shears.

12. "It is not fireproof like metal lath." A salesman of the cheap kind of metal lath, recently said he was ashamed to sell the lath that sells at fourteen cents per square yard, as it will not last long enough for him to get out of the state; to our positive knowledge such lath often if not generally causes repairs to begin in about three or four years. The best metal lath is the wire cloth or wire mesh galvanized, but that has been condemned by the National Board of Fire Underwriters, as it is held by soldered joints, and the solder melts in a fire. In one case the lath is rusted out before the fire comes, and in the other case it melts and so both fail. The stucco board has a fire-resisting backing and the lath cannot burn because they are imbedded between and in asphalt mastic and cement. It cannot rust; it will be there when the fire comes, if it comes, and it will be the last thing to go. It is, therefore, far superior to the metal lath for fire resistance.

13. "It is no cheaper to use than metal lath." If it were not cheaper—yes, even if it were dearer—it should be used on the ground that it is better. But, listen! Good wire mesh costs five cents per foot in small lots, and from three and one-half to four cents in larger lots for a whole house. This sells for three cents per square foot. Then you save the waterproof paper at \$2 per roll, the furring, and the stapling, as well as the nailing of the furring; adding only in this case the labor and nails of putting on the stucco board. As for the cheaper metal lath, you should be ashamed to use it, but we still doubt the saving. The cheapest lath

that should be used or can be used with an ordinary American conscience, costs twenty-five cents per yard. Add to this paper at four cents per yard, and a saving in material which the stucco board makes of at least eight cents per yard to say nothing of the saving in labor which is the big item, and you have thirty-seven and one-half cents as against thirty-three cents for stucco board. It is a general fact that good stucco cannot be done on wire lath without a loss of about twenty-five cents per yard as compared with stucco board, and that is an item of \$100 on an ordinary two-family house. Then comes the saving in sheathing on a new house, for the stucco board is sheathing and high grade waterproof sheathing at that. This saving is about \$150 on such a house. Thus, we can save you \$250 on the outside, and we can show you a saving of about \$200 on the 1,000 yards of plaster on the inside by using the Bishopric Stucco and Plaster Board. Thus we show a total saving of about \$450, which is more than many builders now make on a house (New York City prices).

14. "The Stucco will crack on first coats when setting by reason of the lath strips swelling." Not if you follow directions. A rich stucco will have a tendency to cause surface cracks, and a lean stucco will not be permanent. A body mixture of three to one with seven per cent hydrate of lime will make a satisfactory medium lean mixture that will not crack if it is not allowed to set too rapidly. In cool, damp weather there will be no difficulty; and in warm windy weather the setting of the cement must be retarded by spraying the stuccoed surface with water. This is true whether stucco board or metal lath is used. A good job can only be secured by proper methods of working. If the stucco is allowed to dry too rapidly, the thinner sections between the clinch will set first and then when the shrinkage comes from the rest of the material setting, cracks will show as is well known in stucco work. Follow these proportions and the spraying process and the results will be all that can be desired.



Directions for Applying Stucco Board

CARE OF THE MATERIAL. It is necessary to keep the Stucco Board dry. It should be put under cover promptly on arrival and protected from rain and dampness. When applied to the building it should be thoroughly nailed as fast as put on so that rain will not twist the lath strips before they are fastened. When once thoroughly nailed it does no harm to wet them; in fact, in dry weather it is not a bad idea to sprinkle the exposed surface before applying the stucco. If the lath strips are swelled they can never swell more, and if damp there will not be so great a suction and consequent quick setting of the cement on the surfaces of the strips. It is therefore well to have the lath strips sprayed if dry.

VERTICAL AND HORIZONTAL. Be sure to always have the lath strips cross the grain of the under surface; if the stucco board is applied directly to the studs or wall strips, it should be horizontal, but if put over horizontal sheathing it should always be vertical. Do not imagine that the mortar will not adhere to the vertical strips, for experience shows that it will with the utmost satisfaction. If the sheathing is diagonal, the stucco board should also be diagonal in the opposite

direction, so the two grains will still be crossed. But, as there are so many reasons for having the sheathing horizontal and so few for diagonal, it is hardly worth while considering the diagonal method.

BRACING THE FRAME. There is really no reason for using seven-eighth-inch sheathing in addition to the stucco board (which is sheathing), if the frame is braced diagonally at each corner of all stories.

WINDOW FRAMES. When sheathing is used, you should have the window frames made with wide blind stops and narrow casings so that the stucco board will be lapped something like two inches on the blind stop, and when no extra sheathing is used, the vertical exposed casings should be one and one-eighth-inch thick and have the corners rabbited for about seven-eighths-inch of the total width of four and one-half inches. Door frames should be made in like manner. However, bear in mind that this is not a specific requirement of stucco board and a general requirement of stucco work if you want a tight job. Of course, many jobs are done without meeting these conditions, it all depending on the quality you want.

NAILING. If the stucco board is put on top of seven-eighth-inch sheathing, use four nails to each lath strip, evenly located, and as far as possible, let the nails come near the middle of the sheathing boards beneath. Use 6-penny galvanized wire nails. If the frame is extra well braced, the same manner of nailing can be applied without the seven-eighth-inch sheathing, using 6-penny galvanized wire nails one to each stud crossed.

CUTTING. Saw across the lath strips with a sharp, well set saw, laying the sheets on a bench for the purpose, or on a pair of boxes with a couple of strips of scantling on top and saw between them. For lengthwise cutting, use a coarse rip-saw in the sheet between the lath strips from the back side. If a sheet is slightly large, remove a strip of lath and with snips cut off the sheet and replace the lath as required. Small pieces may be nailed in vertical or horizontal, if the nailing is done near the center of the sheathing board, the purpose being to avoid action by shrinking of the sheathing boards.

PANELLING. Put on the board complete under panels and other similar work, including corners, then put on the outside trim wherever desired. Use seven-eighth-inch trim instead of one and one-eighth-inch and nail directly on the stucco board. This will avoid much cutting. A belt line will shrink in harmony with the second floor beam shrinkage and avoid any tendency to buckling.



Bishopric Stucco or Plaster Board Can't Rust or Sag

There is no metal in Bishopric Stucco or Plaster Board, hence it can't rust. Its lath are nailed to the studding, and have one thousand per cent more holding power than metal lath as commonly applied for stucco work.

Laths make a rigid background, hence it can't sag. The "key" in this lath holds cement or plaster as nothing else can.

Where Bishopric Stucco or Plaster Board May be Used

1. Bishopric Stucco or Plaster Board should be used in place of lath for all *interior* walls, ceilings and partitions in dwellings, apartments, tenements, office and flat buildings. The results obtained are economical and convincing.

First. You save twenty-five per cent in plaster materials, as well as twenty-five per cent of the amount of labor required to put on plaster.

Second. You obtain a wall which is a perfect sound deadener and which, for partition work inside dwellings, office or flat buildings has no equal for sound-retarding qualities.

Third. Bishopric Stucco or Plaster Board is so perfect a non-conductor of heat and cold that you can keep a uniform temperature in your house and have greater living comfort, with an actual saving of twenty-five per cent in fuel.

Fourth. Dampness positively cannot penetrate the asphalt mastic behind the lath, and your building will always be dry and healthful.

Fifth. Architects and experts proclaim Bishopric Stucco or Plaster Board the most up-to-date, scientific and efficient background for plaster which this age has produced.

2. Don't spend your money on wood sheathing and building paper for storm protection! Bishopric Stucco or Plaster Board on the outside of your studding makes them entirely unnecessary. It gives a more solid and substantial wall than lumber; therefore, develops greater wind strength. There are no gaping joints, no widening cracks due to shrinkage, no knot-holes. It's like a solid board.

3. Don't ceil your cellar with lath and plaster! The constant jarring above will develop cracks and loosen the plaster. Use Bishopric Stucco or Plaster Board! The key or dovetail holds plaster like nothing else can.

4. Use Bishopric Stucco or Plaster Board under your floors! It will prevent any dampness from penetrating into the house from the basement and it will make a wonderful difference in keeping your building dry and in preventing draughts.

Live comfortably; it costs no more! You can get all the above results and have the greatest living comfort possible in your home by using Bishopric Stucco or Plaster Board. It will give you walls that are sound-proof, moisture-proof, cold-proof, wind-proof, and in every way of a substantial, everlasting construction. Indorsements from our customers prove the above facts.

Facts on the Cost of Wall Construction

The following figures show, for comparison, the average approximate costs of 1,000 square feet of finished outside wall construction using (1) Weatherboarding, (2) Wooden Shingles, (3) Metal Lath with Stucco, (4) BISHOPRIC STUCCO or PLASTER BOARD with Stucco.

(1) WEATHERBOARDING.

1,200 sq. ft. Boarding at \$22.50 per thousand.....	\$ 27.00
Labor to apply Boarding.....	7.00
1,000 sq. ft. Sheathing Paper..	4.00
Labor to apply Paper.....	2.00
1,300 sq. ft. Weatherboarding at \$30 per thousand.....	39.00
Labor to apply same.....	10.00
One coat Priming, two coats Paint (Prime, 2 gal. at \$1.25 per gal. Paint, 3½ gal. at \$2 per gal.).....	9.50
Painter's labor (3 coats).....	9.00

\$107.50

(3) STUCCO OVER METAL LATH.

1,200 sq. ft. Boarding at \$22.50 per thousand.....	\$ 27.00
Labor to apply same.....	7.00
1,000 sq. ft. Sheathing Paper..	4.00
Labor to apply same.....	2.00
1,000 lineal feet Furring Strips,	6.25
Labor to apply same.....	2.00
1,000 sq. ft. Metal Lath at 22c per square yard.....	24.42
Labor for applying same.....	4.00
Three tons Cement Stucco at \$6 a ton.....	18.00
Labor to apply three coats Stucco at 40c per sq. yd.....	44.40

\$139.07

(2) WOODEN SHINGLES.

1,200 sq. ft. Boarding at \$22.50 per thousand.....	\$ 27.00
Labor to apply same.....	7.00
1,000 sq. ft. Sheathing Paper..	4.00
Labor to apply same.....	2.00
10,000 Shingles at \$5.50 per M.,	55.00
Labor to apply same.....	20.00
Two gallons Cresote Dye or Stain at \$1.25.....	2.50
Painter's labor (one coat).....	2.00

\$119.50

(4) STUCCO OVER BISHOPRIC STUCCO OR PLASTER BOARD.

1,000 sq. ft. Bishopric Stucco or Plaster Board.....	\$ 30.00
Labor to apply same.....	6.00
1¾ tons mixed Cement Stucco at \$6 per ton.....	10.50
Labor to apply same in three coats at 25c per sq. yd.....	27.75

Note the saving on this wall  \$74.25

—o—

NOTE—If your local prices on lumber and other raw materials differ from the above, substitute your prices in comparing the four methods.

No. 4—Lasts forever. Is absolutely moisture-proof, is stronger and warmer than lumber and building paper could make it, never needs painting, greatly reduces fire insurance rates and costs nothing for upkeep.

In addition to this immense saving in the cost of construction, we wish to call your attention to the fact that the weight of the stucco is more evenly distributed over Bishopric STUCCO or PLASTER BOARD, thus lessening the danger of any unusual strain which might cause your stucco wall to crack or give away. Also by mixing a small quantity of hydrated lime with your cement stucco when preparing it, you will waterproof your stucco so as to make it absolutely impossible for any moisture to penetrate to the board. Acids in cement rust and corrode the best galvanized metal lath, but acids in cement in no way injures wooden lath.

In applying Bishopric Stucco or Plaster Board, it is nailed direct to the studs, sixteen inches apart, with No. 6 galvanized wire nails, which makes it absolutely impossible for this board to buckle or warp, or give you any trouble whatever on the wall.

We have sold hundreds of jobs of this material which are giving the utmost satisfaction and will be glad to give you references.



Here's Our Money

Every square foot of Board is sold under our absolute guarantee. If it is not as represented, we will give it back if it is not as represented.

Under this broad guarantee, you have all the chances. The burden of proof is on us. If it doesn't make good, we will give it back. It is a proposition, isn't it?

We make immediate satisfaction.

The Mastic Wall Board & Railing



Money-Back Guarantee

*Bishopric's Stucco Board
guarantee of money
presented.*

*Guarantee you take no
proof is on the product.
we will. This is a fair*

shipment in any quantity.

Roofing Co. Cincinnati, Ohio

Read These Testimonials

80 North Main Street,
BROCKTON, MASS., January 2, 1914.
THE MASTIC WALL BOARD & ROOFING CO.,
Cincinnati, Ohio.

Gentlemen:—I am enclosing photo. of stucco houses, which have been built in Hanover, Mass., for the E. H. Clapp Rubber Co., all using Bishopric Stucco Board. You will see that some of them are in state of framing, others with board applied, and finally with stucco on. These houses cost complete, papered, screened, ready to move into, \$1,485, including architectural services.

I have used this board on thirty houses and find that it gives very good satisfaction when work is done by a competent builder. I do not think that these houses could be completed with any other materials obtaining these looks for anywhere near this amount of money.

Hoping that you will like the enclosed pictures, I remain,

Yours very respectfully,
W. F. BARLOW, JR.,
Architect.



BOSTON, MASS., November 4, 1913.
THE MASTIC WALL BOARD & ROOFING CO.,
Cincinnati, Ohio.

Gentlemen:—Under separate cover we are sending you a picture of Mr. Judkin's house at Needham, Mass., which is finished in Bishopric Stucco Board.

This house caused a great deal of comment while it was being built and all of Mr. Judkin's neighbors advised him strongly not to use any new material of this kind.

The excellent appearance of his house, now that it is finished, has convinced these same people that Bishopric Stucco Board is an excellent material and will no doubt lead to more business in that locality.

Yours truly,
WALDO BROTHERS.

They Tell The Story

THE MINNEAPOLIS PAPER COMPANY,
Minneapolis, Minnesota.

Gentlemen:—I have just finished my new house at Number 2099 Selby Avenue, St. Paul, Minnesota, on which I used Bishopric Stucco or Plaster Board on the interior for plastering.

My plasterer just informed me that in plastering over this Bishopric Stucco Board he claims he used only one-half of the material that he would use in plastering over metal lath.

I thought this would be interesting to you people as it certainly was to me. I also wish to say that during the time that we were putting on the Bishopric Stucco Board on the outside of the house it rained very hard for several days and to our great surprise this rain did not hurt the boards in any way.

I will certainly be glad to recommend your Bishopric Stucco Board to anyone who is in the market for same.

Yours sincerely,

S. A. HEDDING,

Contractor and Builder, Andrus Bldg., Minneapolis, Minn.



BOSTON, MASS., January 26, 1914.
THE MASTIC WALL BOARD & ROOFING CO.,
Cincinnati, Ohio.

Gentlemen:—You may be interested to know that the writer has specified and used Bishopric Stucco Board in a house that he is building. We mention this because it shows our customers that we must have a good deal of faith in this material in order to use it ourselves, and this information may be of value to you in pointing out to your customers that your good distributors are not only selling your products, but using them.

My reason for using stucco board was principally on account of the saving in cost, and at the same time, I felt that stucco board would give me fully as good a foundation for stucco as any other material.

I was also anxious to put as little inside finish in the house as possible, and figured that using stucco board I could let the smooth back of the sheet show between the studs and do away with any further finish on the inside of the wall.

Very truly yours,

WALDO BROTHERS,

By C. S. WALDO, JR.



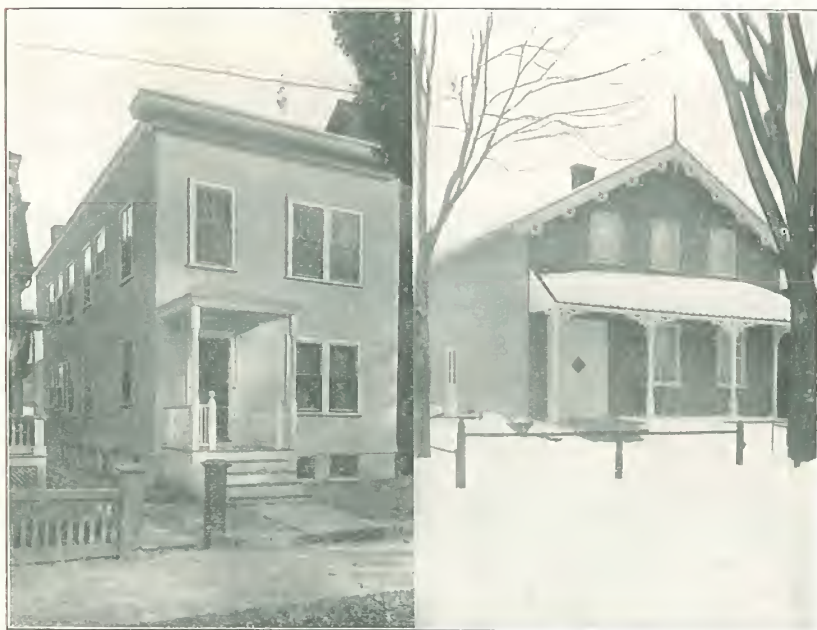
Thirty houses built for the E. H. Clapp Rubber Co., Hanover, Mass. Bishopric Stucco or Plaster Board used on all of them. Architect, W. F. Barlow, Jr., Brockton, Mass. These houses were completed for a cost of \$1,485 each. Contractor's name, Jas. Shields, Forest Ave., Brockton, Mass.



Garage where Bishopric Stucco or Plaster Board was used. Built by Ernst Jahn & Son, Plaster Contractor, Milwaukee, Wis., for Himself. Used No Sheathing and with Entire Satisfaction.



Thirty houses built for the E. H. Clapp Rubber Co., Hanover, Mass. Bishopric Stucco or Plaster Board used on all of them. Architect, W. F. Barlow, Jr., Brockton, Mass. These houses were completed for a cost of \$1,485 each. Contractor's name, Jas. Shields, Forest Ave., Brockton, Mass.



Bishopric Stucco or Plaster used on this House, Cambridge, Mass.

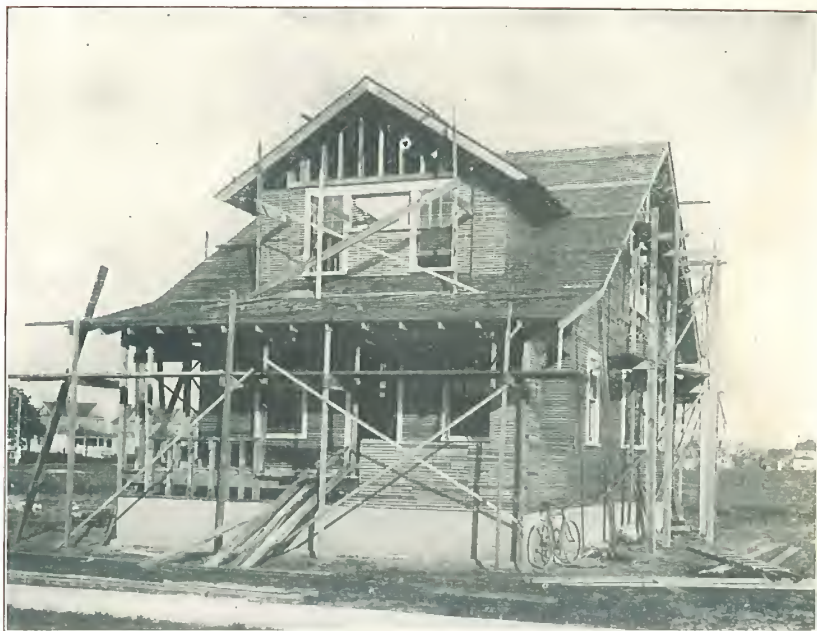
Stucco House, Fifty-five Years Old, on Wood Lath, Ottawa, Canada.



Built by John J. Randall Co., Real Estate and Builders, Freeport, L. I., N. Y., wherein Bishopric Stucco or Plaster Board was used on the entire building.



Exterior Arthur H. Ewald Bungalow, Ready for Stucco.



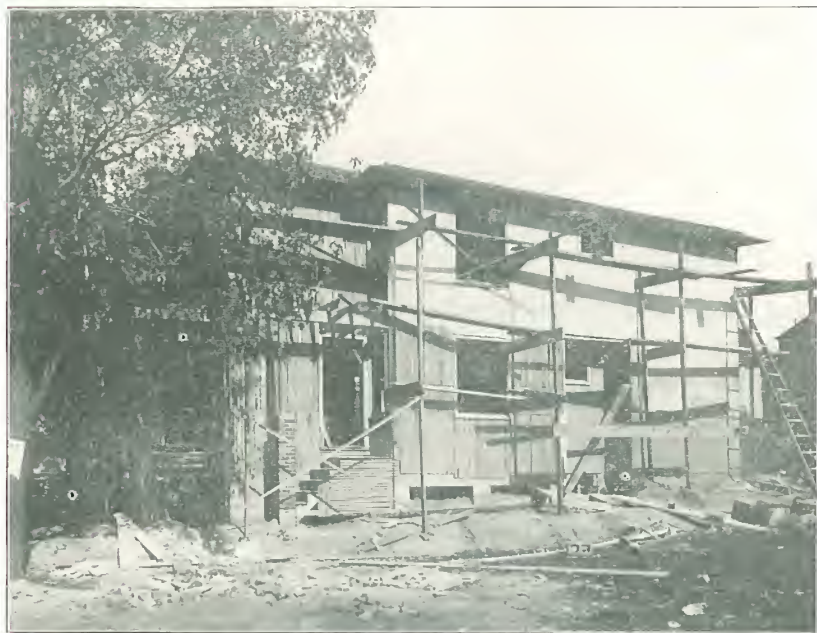
Built by John J. Randall Co., Real Estate and Builders, Freeport, L. I., N. Y., wherein Bishopric Stucco or Plaster Board was used on the entire building.



Arthur H. Ewald Bungalow Completed, where Bishopric Stucco or Plaster Has Been Used, Reducing Cost of Construction.



Residence of Laurier Ave, Ottawa, Canada. Balloon Frame Covered with Bishopric Stucco or Plaster Board.



Residence built by Peck & Benson on Elm Street, Arlington, N. J., wherein Bishopric Stucco or Plaster Board was used vertical with entire satisfaction to contractors and owners.



Stucco House, Hamilton, Bermuda.



Contractor Frank Gustofson, Residence 914 West 36th Street, Minneapolis, Minn. Built at 32nd Street and 18th Avenue. Plasterer, John Bloomberg, 20 George Street. Bishopric Stucco Board used.



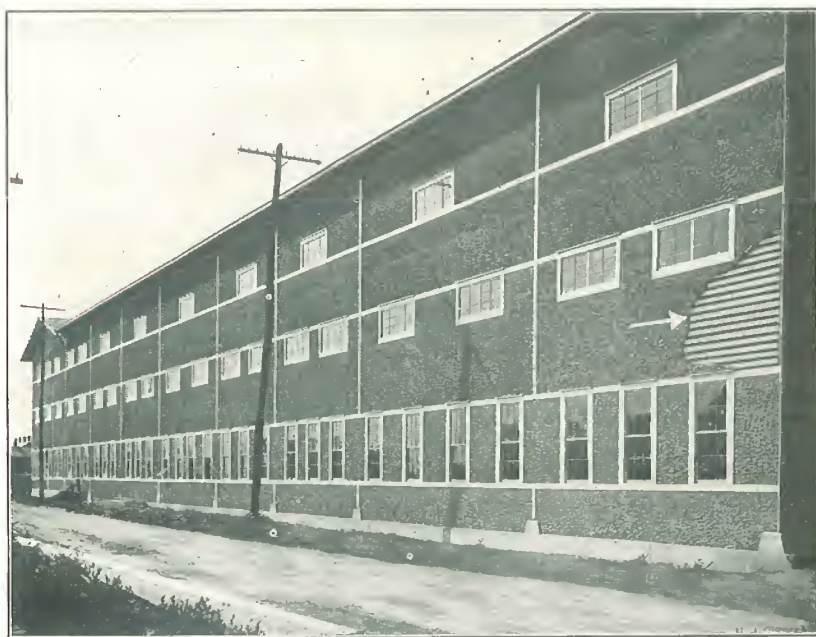
Residence built for E. C. Powell, Alexandria Driveway, Ottawa, Canada, wherein Bishopric Stucco or Plaster Board was used on the exterior and Bishopric Wall Board on the interior. W. E. Noffke, Architect.



**Ocean Pier Bath House, Boston, Mass.
Constructed with Bishopric Stucco or Plaster Board.**



Residence constructed for Mr. Judkins, Needham, Mass., by Wm. J. Paine, Architect, Newtonville, Mass., wherein Bishopric Stucco or Plaster Board was used on the entire building.



Factory Building, New Orleans, Bishopric Stucco or Plaster Board Used.



Residence constructed by Wm. J. Paine, Architect, Newtonville, Mass., wherein Bishopric Stucco or Plaster Board was used on the entire house. Four more now being built.



Two-story House where Bishopric Stucco or Plaster Board was used. Built by Joe Janicki, Plaster Contractor, Milwaukee, Wis., for Himself. Used No Sheathing and with Entire Satisfaction.



Three-family apartment house, built for John J. Doyle, Utica, N. Y. Bishopric Stucco or Plaster Board nailed direct to studding. No wood sheathing used. Absolute stiffness is particularly noticed. Winds have no effect. The above photograph shows building ready for stucco.



Two-story House where Bishopric Stucco or Plaster Board was used. Built by Joe Janicki, Plaster Contractor, Milwaukee, Wis., for Himself. Used No Sheathing and with Entire Satisfaction.

Now, Mr. Prospective Builder, Let's Get Together

IN the preceding pages we have endeavored to give you a comprehensive explanation of the many advantages of Bishopric Stucco Board over *any* other form of background for plaster, cement or stucco work.

There isn't much more to tell.

We want to impress one thing on you, however. It is this: Don't let this important matter "slide" until *after* you have built. When you *plan* your building, take up this matter of backgrounds for your walls.

Ask Your Architect

about Bishopric Stucco Board. If he is not very familiar with it, due, perhaps, to the fact that we have not yet called his attention to it, ask him to write to us for the facts. We'll be glad to have him put it to the hardest test he knows.

You build a home but once—DO IT RIGHT! Profit by the experiences of hundreds of other builders and use Bishopric Stucco Board and save money, get a better job and secure lasting satisfaction.

Put Your Order in Now For Bishopric Stucco or Plaster Board

The demand for Bishopric Stucco Board is tremendous. Builders everywhere are learning of this new way—this better way of building. Figure out your needs and make up your order. We'll ship your order promptly, guaranteeing the utmost satisfaction, as outlined on pages 16 and 17.

The order blank is enclosed; use it.

The Mastic Wall Board & Roofing Co.

Cincinnati, Ohio



Flooring over Bishopric Stucco or Plaster Board

Bishopric Stucco or Plaster Board has proven the ideal material for cement exterior or stucco work. Let it prove the economical and permanent material for underneath flooring and in partitions.

Bishopric Stucco or Plaster Board is the greatest known sound deadener for either floors or partitions in apartment buildings, homes, hotels and hospitals.

The average American child, under eight years, spends more than half his waking hours playing on the floor. That is sufficient reason for applying Bishopric Stucco or Plaster Board to joists before nailing down the flooring.

Bishopric Stucco or Plaster Board serves as a sound deadener and is proof against dampness, frost, as well as cold.

By laying Bishopric Stucco or Plaster Board on the joists and then applying but one, single flooring on the top of it, it prevents any dampness, sound, cold or heat from entering above; it also stops any water from above, ruining decorations.

Illustration as above shows the ideal construction, saving time and money.

THE DOVETAILED KEY
"LOCKS THE PLASTER"
BISHOPRIC
STUCCO OR PLASTER
BOARD
TRADE-MARK REGISTERED

The Keys
that Lock the
Plaster

